

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Shafer , et al.	
Application No.: 10/789,781	
Filed: 2/27/2004	
Title: Liquid crystal polycarbonates and methods of preparing same	
Attorney Docket No.: GEPL.P-093	
Customer No.: 021121	
	Group Art Unit: 1711
	Examiner: T. Boykin
	Confirmation No: 9454

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Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

RESPONSE TO OFFICIAL ACTION

Dear Sir:

This is in response to the Office Action mailed June 3, 2005 for the above-captioned application. Reconsideration and further examination are respectfully requested.

I hereby certify that this paper and any attachments named herein are transmitted to the United States Patent and Trademark Office, Fax number: 703-872-9306 on July 15, 2005.



Marina T. Larson, PTO Reg. No. 32,038

July 15, 2005  
Date of Signature

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Amendment Dated: July 15, 2005  
Reply to Office Action of June 3, 2005

Claims 1-49 stand rejected as anticipated by US Patent Publication 2003/0078347. These claims are directed to liquid crystal polycarbonates. The claims specify that the liquid crystal polycarbonate must contain at least two species of aromatic diol selected from a specified list of eight aromatic diols.

The reference does not disclose liquid crystal polycarbonates. It merely mentions liquid crystal **polyesters**. (¶ 41 and claim 42). Furthermore, it is noted that ¶ 41 lists polycarbonates and liquid crystal polyesters as separate materials. While polycarbonates can be considered polyesters, not all polyesters are polycarbonates. Therefore, the Examiner may not infer that a liquid crystal polyester is a polycarbonate, nor that it is a polycarbonate with the components specified in the claims of this application.

In the Office Action, the Examiner relies on *Ex parte A*, 17 USPQ 2d 1716, as supporting her position that because the reference discloses three of the diols from the list in the claims that the reference is anticipatory. This argument is not at all consistent with the holding in *Ex parte A*. The decision in *Ex Parte A* says that where a compound is expressly disclosed, as in the Merck Index, the fact that there may be many other compounds also disclosed is not relevant to the question of anticipation. *Ex parte A* also comments on other law, however, noting that in these cases:

to arrive at the claimed subject matter, it was necessary to select portions of that subject matter from various sections of the reference disclosure and combine them, e.g., selecting values for variable substituents to interpolate into a generic structural formula to arrive at a specific compound.

17 USPQ2d at 1718. This is the situation in this application, namely that one would have to select portions of the subject matter disclosed in the reference and combine them to arrive at the claimed invention. The Examiner is reminded that the species in this case is the combination of the two or more specific diols. This combination is not disclosed, and therefore not anticipated, by a list that includes many additional diols, in the absence of some additional teaching.

As MPEP § 2131.02 (the same section cited by the Examiner explains),

when the compound is not specifically named, but instead it is necessary to select portions of teachings within a reference and combine them, e.g., select various substituents from a list of alternatives given for placement at specific sites on a generic chemical formula to arrive at a specific composition, anticipation can only be found if the classes of substituents are sufficiently limited or well delineated. *Ex parte A*, 17 USPQ2d 1716 (Bd. Pat. App. & Inter. 1990).

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This same law is appropriately extended to the selection of reagents for use in a method as in claim 1 of this application. Thus, as explained in *In re Arkley*, 172 USPQ 524, 526 (CCPA 1972), for an anticipation rejection to be proper, the reference "must unequivocally disclose the claimed compound or direct those skilled in the art to the claimed compound without any need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference."

Picking and choosing is what would be required in the present case to go from the teaching of the reference to the claimed invention. The cited reference has a long list of aromatic diols. This list includes many diols that are not among the 8 listed in applicants' claims. There is no express teaching of any combination that would meet the limitation of the claims of this application. The mere fact that a few of the possible combinations from the reference may fall within the scope of the present claims is not sufficient to establish anticipation.

Finally, Applicants note that the Examiner states in her argument that "applicants disclose a liquid crystal polyester, which is anticipated by the claimed invention." This statement cannot be understood. When the Examiner refers to applicants, does she refer to the applicants of the cited reference, or the applicants of the present invention. Similarly, what claimed invention is referred to. The what the claimed invention of this application might anticipate is not at issue. On the other hand, what is claimed in the reference is not relevant to anticipation either. The claims of the reference may well be broad enough to dominate the present invention yet this does not mean that everything within their scope is anticipated. Only the disclosure of the reference matters, and the cited reference makes no disclosure of any composition or method that is even remotely similar to the present invention.

For these reasons, this application is now considered to be in condition for allowance and such action is earnestly solicited. Applicants note that an Information Disclosure Statement based on a foreign search report, with the applicable fee was mailed on July 13, 2005 together with the appropriate fee. Consideration of this IDS is requested.

Respectfully Submitted,



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